CECW-PD 11 December 1998

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Economics Guidance Memorandum Number 99-2: Fiscal Year 1999 Interest Rates

The enclosed data for Fiscal Year 1999 is provided for immediate use. Questions related to this memorandum should be addressed to Ron Conner, CECW-PD, (202) 761-0132.

FOR THE COMMANDER:

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1. Federal Discount

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2. Repayment and

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Federal Discount Rate FY 1999

Project Evaluation and Formulation Rate: Section 1.4.11 of the Principles and Guidelines states: "Discounting is to be used to convert future monetary values to present values. Calculate present values using the discount rate established annually for the formulation and economic evaluation of plans for water and related land resources." The interest rate of 6-7/8% is to be used by Federal agencies in the formulation and evaluation of plans for water and related land resources for the period October 1, 1998, through and including September 30, 1999. This rate has been computed in accordance with Section 80 of Public Law 93-251, and is to be used in the evaluation of National economic effects of water and related land resources plans for the purpose of discounting future benefits and computing costs, or otherwise converting benefits and costs to a common time basis.

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Federal Discount Rates for Project Formulation and Evaluation

Fiscal Year	B.B.C. A-47	S.D. 97	WRC 1968 Reg.	P & S	WRDA 1974 Sec. 80
1957-60 1961	2.500% 2.625%				
1962	2.625%	2.625%			
1963 1964		2.875%			
1965		3.000% 3.125%			
1966		3.125%			
1967		3.125%			
1968		3.250%			
1969		3.250%	4.625%		
1970			4.875%		
1971			5.125%		
1972			5.375%		
1973 1974			5.500% 5.625%	6.875%	5.625%
1974			5.025%	0.0/5%	5.875%
1976					6.125%
1977					6.375%
1978					6.625%
1979					6.875%
1980					7.125%
1981					7.375%
1982					7.625%
1983 1984					7.875% 8.125%
1985					8.375%
1986					8.625%
1987					8.875%
1988					8.625%
1989					8.875%
1990					8.875%
1991					8.750%
1992 1993					8.500%
1993					8.250% 8.000%
1995					7.750%
1996					7.625%
1997					7.375%
1998					7.125%
1999					6.875%

Repayment and Reimbursement Interest Rates For Fiscal Year 1999

I. Interest on Deferred Payments

- A. Deferred payment reimbursed during the construction period. Interest will be charged on each Federal expenditure made in lieu of non-Federal contributions for the period between the expenditure and the reimbursement, except as noted in paragraph E. below.
- B. Deferred payments reimbursed over a period of time following completion of construction (reference Sections 103(a)(4), 103(b), and 103(k) of P.L.99-662). Interest will be charged for each Federal expenditure (first costs) made in lieu of non-Federal contributions for the period between the expenditure and the end of construction. The first costs plus this interest will then be amortized over the selected repayment period.
- C. Repayment under section 101(a)(2) of P.L.99-662. Repayment of up to 10 percent required under this section will not include any interest for the construction period only.
- D. Interest Computation. Expenditures each month will be totaled and interest computed as though all the expenditures were made at the mid-point of the month. Interest will be compounded annually on the anniversary of the expenditure. Periods of less than one year will be converted to a fraction of a year (interest charge = principal at beginning of period x interest rate x fraction of a year).
- E. Delay of initial payment under sections 101(d) and 103(1) of P.L.99-662. Delayed initial payments for up to one year approved by the ASA(CW) shall be assessed interest for one-half the period of delay.

II. Rate of interest to be applied to deferred payments

A. Reimbursements during the construction period. The

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interest rate will be determined by using the formula specified in section 106 of P.L.99-662. The maturity period shall be equal to length of time between the Federal expenditure and the reimbursement.

- B. Reimbursement after completion of construction. The rate of interest to be used in computing interest for the construction period and to amortize the total obligation at the start of the repayment period (first cost plus interest) will be the rate determined using the formula in section 106 of P.L.99-662. For example, when the repayment period is 30 years, the interest rate shall be determined by the Secretary of the Treasury, taking into consideration the average market yields on outstanding marketable obligations of the United States with remaining periods of maturity of 30 years during the month preceding the fiscal year in which costs for the construction of the project are first incurred plus a premium of one-eighth of one percentage point for transaction costs.
- III. Payment Schedule. The payments, where reimbursement is made after completion of construction, shall be in equal consecutive annual installments, the first of which shall be due and payable within 30 days after the non-Federal interest is notified by the contracting officer that the project or project modification is completed and operational for the purpose(s) for which repayment is being made. Annual installments thereafter will be due and payable on the anniversary date of the date of notification. Except for the first payment which will be applied solely to the retirement of principal, all installments shall include accrued interest on the unpaid balance at the rate provided above. The last installment shall be adjusted upward or downward when due to assure repayment of all of the indebtedness.
- IV. Five-Year Recalculation of the Interest Rate Applicable to Deferred Payments. The formula used to determine the interest rate under paragraph II.B. above will be used for each recalculation. For example, if the original maturity period is 30 years, then the interest rate for each recalculation will use the current Fiscal Year interest rate for 30 years. Annual payments, however, will be based on the remaining repayment period.
- V. Expenditures between Feasibility Studies and Construction.

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Federal expenditures not covered by the FCSA for feasibility studies and made prior to the PCA for construction (PED) will be treated as first year construction costs subject to interest charges based on the preceding paragraphs as though the expenditures were made at the beginning of the first year of construction.

VI. Projects Authorized for Planning, Engineering, and Design. Planning and engineering will be cost shared 50-50 in accordance with Section 105(b) of P.L.99-662. Expenditures for design will be treated in accordance with paragraph V. above.

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Interest Rates for Computing Non-Federal Repayments Fiscal Year 1999 (Section 106 of P.L. 99-662)

FROM		<u>TO</u>			<u>Rate</u>
0 Years - 3	Months (0 Years	- 4	Months	4-7/8%
0 Years - 5	Months (0 Years	- 8	Months	5%
0 Year - 9	Months	6 Years	- 1	Month	4-7/8%
6 Years - 2	Months :	11 Years	- 4	Months	5%
11 Years - 5	Months :	13 Years	- 9	Months	5-1/8%
13 Years - 10	Months :	15 Years	- 10	Months	5-1/4%
15 Years - 11	Months :	18 Years	- 6	Months	5-3/8%
18 Years - 7	Months 2	22 Years	- 10	Months	5-1/2%
22 Years - 11	Months 2	29 Years	- 8	Months	5-3/8%
29 Years - 9	Months 2	29 Years	- 11	Months	5-1/4%

Note: The above interest rates do not include the one-eight (1/8%) of one percentage points for transaction costs required by Section 106 of P.L.99-662.

Water Supply Interest Rates

I. WATER SUPPLY ACT OF 1958

The following interest rates have been determined by the Department of the Treasury in accordance with provisions of the Water Supply Act of 1958, Section 301 (b). These rates are applicable to projects under construction with authorized water supply storage and reallocations approved prior to the effective date (17 November 1986) of PL 99-662.

FISCAL YEAR	INTEREST <u>RATE</u>	FISCAL <u>YEAR</u>	INTEREST RATE	FISCAL <u>YEAR</u>	INTEREST <u>RATE</u>
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971	2.670% 2.699% 2.632% 2.742% 2.936% 3.046% 3.137% 3.222% 3.225% 3.255% 3.256% 3.342% 3.463% 3.502%	1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985	3.649% 4.012% 4.371% 5.116% 5.683% 6.063% 6.595% 7.250% 8.605% 9.352% 10.051% 10.403% 10.898% 11.070%	1988 1 1989 1	10.693% 10.371% 10.250% 10.075% 9.920% 9.737% 9.503% 9.319% 9.319% 9.226% 9.134% 9.012% 8.874% 8.703%
19/Z	3.5046	1900	11.070%		

II. WATER RESOURCES DEVELOPMENT ACT OF 1986 - PL 99-662

The following interest rates have been determined by the Department of the Treasury in accordance with provisions of Section 932 of PL 99-662. These rates shall be used for contracts for storage reallocated to M & I water supply and for surplus water contracts, and for new projects not under construction as of 17 November 1986, where repayment is made over a 30-year period. The interest rates shall be readjusted every 5 years. For shorter term repayment periods, interest rates to be used are the same as specified under Section 106 of PL 99-662, (reference

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enclosure 2). Note: The authorized one-eighth of one percentage point for transaction costs has already been added to the Department of Treasury furnished rates in the values shown below.

1987 7.625% 1988 10.000% 1989 9.250% 1990 8.250% 1991 9.125% 1992 8.125% 1993 7.500% 1994 6.125% 1995 7.750% 1996 6.750% 1998 6.750% 1999 5.375%	FISCAL YEAR	INTEREST	RATE
1989 9.250% 1990 8.250% 1991 9.125% 1992 8.125% 1993 7.500% 1994 6.125% 1995 7.750% 1996 6.750% 1997 7.125% 1998 6.750%	1987	7.625%	
1990 8.250% 1991 9.125% 1992 8.125% 1993 7.500% 1994 6.125% 1995 7.750% 1996 6.750% 1997 7.125% 1998 6.750%	1988	10.000%	
1991 9.125% 1992 8.125% 1993 7.500% 1994 6.125% 1995 7.750% 1996 6.750% 1997 7.125% 1998 6.750%	1989	9.250%	
1992 8.125% 1993 7.500% 1994 6.125% 1995 7.750% 1996 6.750% 1997 7.125% 1998 6.750%	1990	8.250%	
1993 7.500% 1994 6.125% 1995 7.750% 1996 6.750% 1997 7.125% 1998 6.750%	1991	9.125%	
1994 6.125% 1995 7.750% 1996 6.750% 1997 7.125% 1998 6.750%	1992	8.125%	
1995 7.750% 1996 6.750% 1997 7.125% 1998 6.750%	1993	7.500%	
1996 6.750% 1997 7.125% 1998 6.750%	1994	6.125%	
1997 7.125% 1998 6.750%	1995	7.750%	
1998 6.750%	1996	6.750%	
	1997	7.125%	
1999 5.375%	1998	6.750%	
	1999	5.375%	

Hydropower Interest Rates

Interest rates determined by the Department of the Treasury relating to hydropower purposes under Secretarial Order RA 6120.2 Paragraph 11 (c) of the Secretary of Energy and Departmental Manual 730 DM 3 superseding Secretarial Order 2929 of the Secretary of the Interior.

Note: These rates are applicable to calculation of interest during construction, repayment of investment costs, and capitalized O&M costs.

Fiscal Year	Rate	Fiscal Year	Rate
1973	5.500%	1986	11.375%
1974	6.625%	1987	8.875%
1975	6.125%	1988	8.500%
1976	6.625%	1989	9.250%
1977	7.000%	1990	8.875%
1978	7.000%	1991	8.750%
1979	7.500%	1992	8.500%
1980	8.000%	1993	7.875%
1981	8.500%	1994	7.125%
1982	9.000%	1995	7.125%
1983	9.500%	1996	7.625%
1984	10.750%	1997	6.875%
1985	12.375%	1998	6.875%
		1999	6.000%

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DELINQUENT PAYMENT COLLECTION INTEREST RATE ARTICLE XVI, ER 1165-2-131

Background - Paragraph a., Article XVI of ER 1165-2-131 explains the procedures used to calculate the interest rate for delinquent payment collection. Review of this article indicated that the verbiage contained in paragraph a. is not adequately clear to allow for consistent determination of the interest rate. In addition, the paragraph suggests that the interest rate should be determined by the Secretary of the Treasury. After reviewing the article, the Department of Treasury has developed the following procedure for the calculation of interest rates.

Procedure - The interest rate used in the collection of delinquent payment under this Article will be equal to the equivalent coupon-issue yield for 13-week Treasury bills in the month immediately preceding the date that the payment became delinquent or auctioned immediately prior to the beginning of each additional three-month period if the delinquency exceeds three months. District offices may obtain the equivalent coupon-issue yield by calling Mary Ann Martin, Financial Management Branch, Department of the Treasury, (202) 874-9950. The rate obtained from Mrs. Martin will then be multiplied by 1.5 to determine the interest rate used for repayment of the delinquency. Questions concerning this procedure can be addressed to CECW-PD staff at (202) 761-0132.